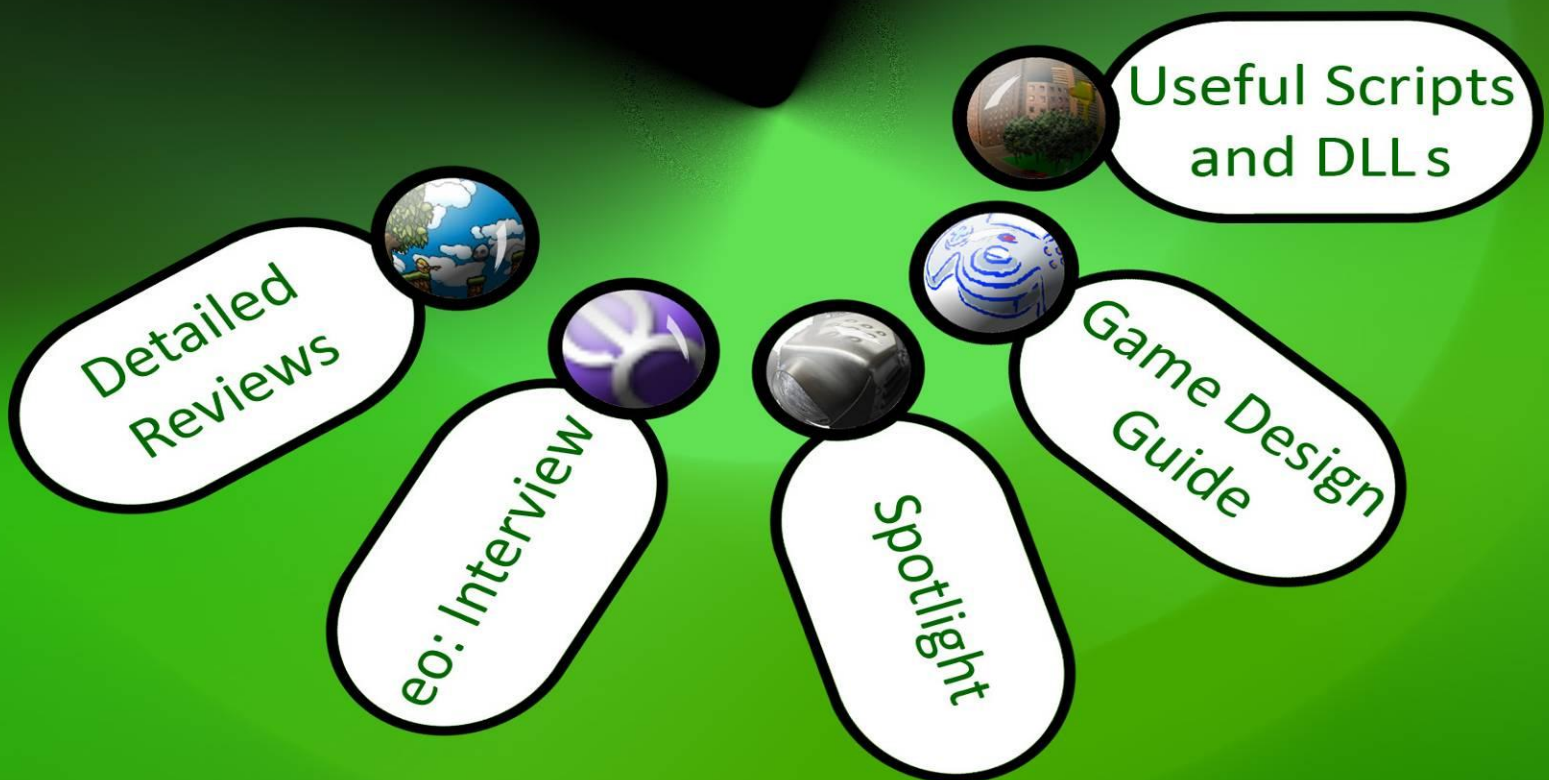


MarkUp



- Game Maker's Benefits
- Guide to Game Publishing
- and more!

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Welcome!

Welcome to the very first issue pilot of what we hope will be a long-lasting phenomenon, the new MarkUp magazine!

MarkUp is written by game developers, for game developers. Since this is our first issue, it is certain that there are some bugs, and some things we could do better, so we welcome your comments.

We wanted to create this magazine, and share it with you, because we love games and game development. In fact, this love is what made us want to make sure that the game developers out there have the knowledge and resources to make more games, even better and more often.

In this Magazine, we aim to provide you with the highest quality you could get, from articles to reviews - all what you need to know about the Game Maker Community, Game Maker, and game development in general.

This Magazine's origins could be traced to the original MarkUp magazine created by almost the same team, we lost some good editors but nothing has changed ever since, in fact, we have decided to "enlarge" our magazine and make lots of improvements to its concept, and hopefully, it would receive a much larger audience than the original one did.

The magazine is currently being written by a small and limited number of people, but we hope that in the future more people will participate in this magazine. By participating you help us grow and provide game-lovers like yourself with much better and richer content.

At any rate, enough small talk! Dig on in and enjoy Issue #1 of the new Markup. Let the reading begin!

The editors of MarkUp
including Eyas Sharaiha,
Andris Belinskis
and Robin Monks

Game Making Forums

By Eyas Sharaiha

Good, Bad, or Ugly?

As time goes by, we are starting to see more and more forums related to game making, programming, and Game Maker in general. This phenomenon has its rewards and disadvantages. Its usefulness might be expanding the Internet; providing users with more resources and uniting them. Overall, this would allow them to work more efficiently in groups, and therefore have a better output.

However, it can be argued that the increase of game making forums is leading to “uniting the members”; some say this is leading to the separation of Internet users.

That may be true; when we have more game making forums, internet users are more likely to be spread across the different forums instead of being united together in a smaller number of forums.

Another disadvantage is the existence of forums with no (or little) useful content inside, which would repel users not only from that particular forum – but sometimes even discourage them to try other forums! This may seem unlikely, but this does happen all too often.

The points we have mentioned are way too general, they discuss arguments for and against game making forums in general, but there is more than one type of forum, and those arguments may differ between the multiple forum types.

Some people set up general game making forums; doing that is generally a bad idea unless they really know what they are doing. They should have lots of specialists in every area the forum discusses, and, if this is the case, and they were lucky enough to get some active members, then the forum is supposed to grow and be a good

resource for members across the internet.

On the other hand, general forums whose administrators have no idea about what they have just started often provide nonsense and waste everybody’s resources; those of their hosts, those of the members who visit the forum, and those of the administrators themselves.

Such forums also increase the spreading of internet users across different forums. This might be a disadvantage, *but* it may be argued that having them spread across the forums will allow each forum to only have the number of members it is capable of serving (a satisfactory level of members), and therefore allow each well-made forum to work at its best.

There is another type of forum, the specialist game making forums. These include many sub divisions. They could be forums that are dedicated to a certain programmer or company, where members will gain access to many of their products, discuss them, and ask for support about those products.

For me, this type of forum is really good, since it is almost 100% guaranteed that the members will get what they registered for. That is because these forums usually offer things within the capabilities and knowledge of its administrators, that is, support for their own programs and similar things.

Also, members do not usually waste their time by joining such forums, because they usually know what the forum offers in the first place, so they only join if they need the features being offered to them. The Game Maker Community is an example of such type of forums, since it has been created to provide Game Maker users with game maker support.

However, at the same time it has expanded to allow the users to join together and help each other themselves. This mutual help could be done by creating tutorials and examples for other members to read, or having members answer each other’s questions regarding game maker.

Not only that, but it also contains a very important feature that makes it even more useful, and that is to provide **indirect support** to its members in addition to direct support. Direct support includes helping them diagnose issues with Game Maker itself and help programming with it, while indirect support is the support these members are given when they successfully create their own game or work in progress that is showcased in the community.

I believe the Game Maker Community is an example on beneficial communities to any game developer. They aim to solely concentrate of the product that they have to offer by requesting support for it, discussing it, and showcasing what has been developed with it.

Another type of forum is dedicated to one specific piece of software or programming language; however its administrators are not its creators. It is simply created by people who are either unsatisfied with the way the existing official forum is run (if any), or just aim to provide expansions to these forums.

These would include good forums like the Games Showcase and Game Maker Games. The problem is, many people like to create their own forums and create useless forums similar in purpose to these; which would in turn waste users’ time when looking for good sites with useful resources.



Detailed Games Review By Eyas Sharaiha

Vivid Conceptions

By: Mr.Chubigans

Mr.Chubigans and his Vertigo Games are probably well known throughout the GMC for the high quality and excellent creations that are being released. Vivid Conceptions is one of these games, a platform game like never seen before, it has excellent effects, sounds, music, game play, and most of all: a great storyline.

The game itself showcases the qualities of Mr.Chubigans as an excellent programmer, great writer, and a very imaginative person. It is something the members of the GMC never saw before, a game where the player is a micro-organism fighting for its survival! This micro-organism can reproduce (asexually), have dreams that affect its actual lives, and as always: fight and jump, but beware from the ants which have penetrated the earth's crust and destroyed most of this species by its ignorance.



Music

This time I will start by actually reviewing the music of the game, which I think is spectacular. The music is so excellent, professional, and obviously well composed. The quality of this music is so high that it sounds exactly like an orchestra performing right in front of you.

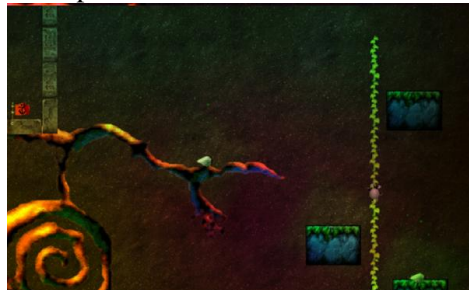
The pace and theme of the music suites the game's own theme and atmosphere, it gives you the feeling of sadness yet

calmness, defeat yet determination, destruction yet power – in one word: it's amazing! I've listened to the music for a while and found it completely flawless, it is also calming and helps the player concentrate on the game without getting too nervous edgy.

The one thing that I would recommend the most in this game to others is its music! Even those who do not like this sort of calming music will find it well-suited with the game. The music is well coordinated with the graphics, effects, storyline, and in general: game-play, so I'd definitely give its music a 10. Well done!

Graphics

The graphics of this game were very good looking indeed. I liked their amount of detail a lot, and it looked like they served their purpose in the game. Unlike most platform games, its platforms were not just flat horizontal lines, but rather a mixture between normal smooth terrain, rough rocks and grounds. The graphics were very dark, this have emphasized the theme that the music was meant to do: create this atmosphere of defeat and sadness.



Though I did like the graphics to some extent, I must say I have expected more, edges of graphics were very sharp and did not blend easily with the background. Also, I didn't really like the player's sprite that much. To the spriter's (Him) credit, the animations were excellent, the player's walking

and climbing was very smooth as if it was real. I give the game 7.5 out of 10 in graphics. That's really excellent, and would've been better if the sprites blended better with the backgrounds and had smoother edges.

Graphic Effects

I had to create this new category for graphical effects separate from the graphics category, because it would've been unfair for the game to ignore its excellent effects. The game uses GearGOD's Luminaire engine, a spectacular lighting and lighting effects engine. Mr.Chubigans has clearly taken full advantage of this engine by using lots of different effects in most parts of the game. The blending effects of the game are awesome. This exceptional use of the graphic effects in the game has greatly highlighted the game's outstanding theme and atmosphere. These graphical effects however are very demanding when it comes to processing and computer resources, which means that you need a powerful machine to play the game with its graphic effects enabled. (Nonetheless, there is a version available that does not include the effects.) I give the graphical effects of the game a 9, that's great!

Storyline

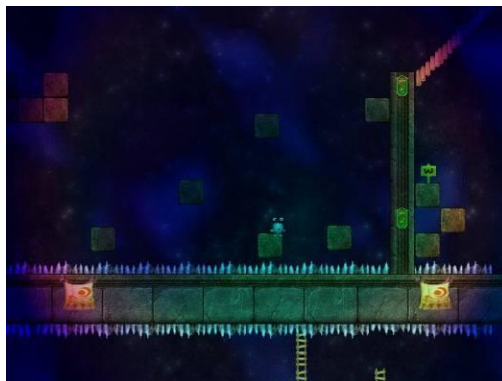
The story of the game obviously reflects the high level of intellectuality and brilliance of the creator. The story itself is so creative and imaginative; it takes place probably billions of years ago when the ancient Bantam species is almost extinct after ants have found their way through the earth's crust where they destroyed the complete civilization of this highly intelligent species by the ants' ignorance and foolishness. Now, one of the few survivors of the Bantam species must travel its way to someplace near the earth's center in search for the last

Detailed Games Review

refuge for this species on the earth. The problem is that the ants and the Bantam will actually cross pathways, and that's when you must show you're true skills as a player, to help your Bantam survive against the ants, and therefore allow it species to live for a billion more years – if not till forever! I give this spectacular piece of artwork 9.5 out of 10.

Game Play (Controls)

The controls of the game were very good; you had the ability to easily and fully control your player by moving around with the conventional arrow keys, and jump with the "A" key, with the addition of some other keys that you could use a form of attack only when acquiring an upgrade for the bantam. The only problem that I have faced with the controls was a very minor one: I always kept doing mistakes between the keys of the upgrades. I give the game 8.5 in Game Play and Controls.



Game Play (Difficulty)

Personally, I would classify this game under "difficult" games, not because of its hard levels, but because you may need to get used to the games and learn its tricks. The game, like many other platform games is based on the "one hit defeat" idea, which may seem harsh but is a normal thing in platform games. Another excellent feature of the game would be its unique checkpoints system that does work according to the

seeds collected and not according to pre-specified checkpoint areas. The game gets a 9 in the category: Game Play and Difficulty. That is very good.

Game Design

The game is obviously well-designed and well coordinated. The atmosphere of the game is great, the way everything is consistent is great, the choice of effects and music is great, and the "level design" itself is great. Every object in the game is well-positioned and studied well. The game has been tested by many and it has been made sure that all areas and levels are accessible, some easily, and some with difficulty. I can't stop saying "the game is excellent", because it really is. I give the game design 9 out of 10, excellent.

Overall

The game gets a score of 8.93 out of 10. This is a very excellent score. The game is great and I definitely recommend it to everyone!

Boingo

By: Gizmo199

Many people do believe that first games tend to be of low quality and just bad in general, but Gizmo199 has proven them wrong! Others think that games that are done with no or little Drag 'n' Drop aren't of good quality, but again, they were proven wrong! Boingo is a very simple game, mainly written with the simple Drag 'n' Drop functions "except for the alpha stuff", as Gizmo199 said.

Graphics

7/10 – The graphics aren't so good, but they suite the purpose of the game. However, it would be better if they were improved a bit more.

Music

8/10 – I very much liked the music in the game; it was well composed, and

suited the game pretty much. The only problem is: it isn't original.

Sound Effects

8.5/10 – The sounds of the game really suited, I thought they were simple and were not annoying at all; as a matter of fact, I thought they enriched the game.

Storyline

6/10 – Well, it was a little bad, not sure if the story itself was bad or just the way it has been told, it didn't make me excited or made me like the game more, I think it was a little bit too simple, and additional complexity and creativity would have been better.

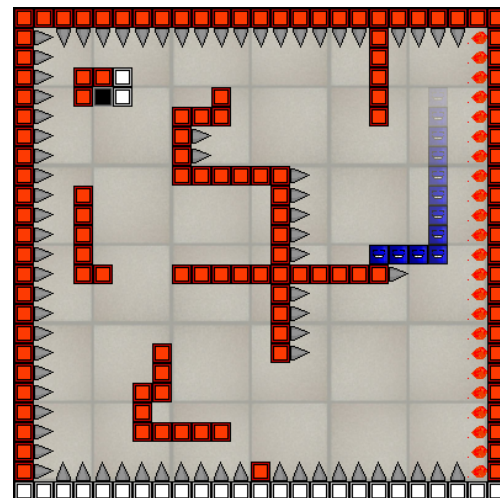
Game Design

7.5/10 – The game design was very simple, but it was well-coordinated.

And, considering this was a first game, that's very, very good!

Overall

7.4/10 – That's very good!



Detailed Games Review Cont.

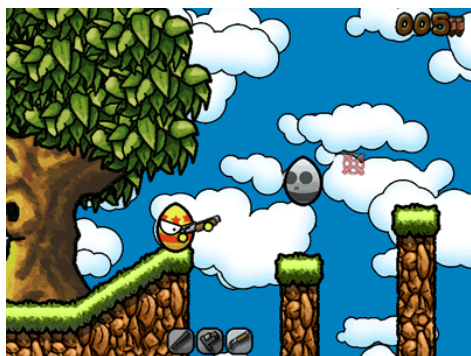
Easter Avenger

By: Josepho

For those of you who have not played Easter Avenger yet, I'm telling you: you have missed a lot! This game is one of the very well done games. I have thought it was great in almost every aspect: excellent graphics, great game play, nice music, and the game is very addictive.

Graphics

For some reason, most reviewers start by reviewing the graphics, personally, I don't think that graphics are the most important, never the less, I'll start by reviewing them! As you can see in the screenshot below, the game is very colorful, bright and happy, and at the same time: very well done. I like the childish and sarcastic flavor that has the graphics (and the rest of the game actually) has added to the game. I'm also very impressed with how smooth they are in terms sprite edges, as well as the details of the sprites themselves.



All of the graphics look very game-like; some of them even look more or less "realistic", like the tree in the screenshot for example. I also liked how much detailed are all the graphics; this has reflected the skill of the artist and the great ability of paying attention to little details.

The excellent quality level of the graphics actually make the player unconsciously – and sometimes consciously – feel better about the game and enjoy it more! Also, the

clouds looked very cartoonish and fun, I liked them a lot, and having them move slowly to the left gives the game a nicer feel.

In one word, I would describe the graphics as excellent! Now usually, I don't like giving 10's in reviews, because I believe nothing is perfect, but as I was paying attention to all of the details in the graphics, I have failed to find any flaw in them, so I have no choice but to give this game a 10 in graphics!

Music (Background)

The background music made me feel much more excited towards the game, and, in those rare moments throughout the game that lacked action: the music was what kept me going; didn't even get bored for a second! The music very well suited the game-play, but I noticed it didn't fit the storyline as much.

The story took place in another planet where chocolate was considered a deadly substance, and even though the music was really fun, it wasn't of the same level of sarcasm as the storyline itself, which created some sort of minor imbalance. I have got the feeling that the music was more serious than the story, probably not like Josepho meant it to be.

As it comes to music quality, I think it was excellent indeed, very well-composed, found no problems in it, and as I said before: it was very enjoyable. The rating of the Background Music in the game is an 8.5, that's excellent on my scale.

Sound Effects

As to the sound effects, I found they paid lots of attention to details, for example when jumping, there's this well-done "boink" sound that matches the jumps. This bounce sound is also used for the enemy eggs' step sound effect (since they moved by bouncing off the ground).

Sound effects are well used; they only exist when they are needed – no excessive use of sound effects, and no unneeded sound effects. Gunshots and bat-hits have interesting sounds indeed. Another part of the sound effects that I liked is the baseball music that is occasionally heard in the background when you hit an egg very strongly and it gets thrown away hardly! I found that very funny and beneficial for the game's atmosphere as well; it made me laugh in serious "stressful" moments during the game! With this in mind, I give it a 9 in Sound Effects; it's great, because few people pay attention to the sound effects at all!



Storyline

One of the first few lines in the introduction part of the story contains the picture above and some text that says: *"Egg with glasses: I'm innocent! I haven't done anything! NO!!!"* This is probably a good example to show how the tone and theme of the whole story (note the big chocolate "bowl"), and it's really nice to have some fun once and a while.

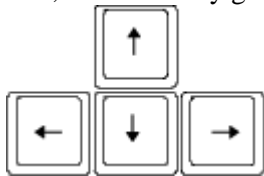
The storyline is fine, but from what I have seen so far as to high standards of the game, I must say I was disappointed; it clearly wasn't of the same quality as the rest of the game elements. I felt as if the process of coming up with a storyline was rushed a lot, and, if the creator has thought of something better, the whole game could have been even better!

Detailed Games Review Cont.

As a storyline alone, I would give it a higher mark, but since it doesn't fit the rest of the game very well I'm going to give it a 7.5 out of 10.

Game Play – Controls

The controls of the game play use a combination of keyboard and mouse. You can use the mouse for aiming, and the keyboard for movement, plus a mouse-click for attack. I think the controls are very smart but yet nothing new, but being "nothing new" is a good thing when it comes to game controls, because the more are people familiar with this control type, the better things are; people will get adjusted easily to your game and therefore bond more easily to the game. As it comes to controls, I give the game a 9, which is very good.



Game Play – Difficulty

Having a difficult game is a good thing in most cases, and this game is considered more or less difficult. Things like one-hit death may sound really harsh but is very normal in platform games (remember Mario?). The difficult thing about game play was actually hitting the enemy egg. I would aim correctly at the egg most

times, but I clicked either too early or too late, and because of the detailed sprites are animations, one may actually miss an egg if late for a few milliseconds!

The collision-checking is very accurate, and I do think that having a larger mask would be much better. For these reasons, I give the game an 8.5 – great!



Game Design

Game design includes all the previous elements, but I'm judging it here according to the co-ordination between the different elements. The game design is excellent! Very smooth, no bugs, colorful, and has all the most important characteristics of good game design. Background sounds, background graphics (e.g. clouds), detailed graphics, and colorful graphics; there are almost no moments where you only have to walk around! Also, the movement system is very

good, the terrain system is even better, I really liked the slopes and how you go up and down very smoothly. I also like the aiming system, and how the hand move with the aiming but on the opposite site so that when hitting it would move the right site – that was VERY well thought out!

I also like how the eyes change direction according to the mouse position and not the keyboard keys (pressing forwards or backwards). I like this great attention to details; I like the animations, constant movements of everything around, and basically – the whole atmosphere!

Game Design includes almost everything, it is a big category and this is the most important part of the game itself, no doubt. Anyways, my rating for the Game Design section is 9.5 out of 10! That is exceptionally good.



Overall

The game gets 8.86 out of 10! That's excellent!



Introduction to Game Publishing By Eyas Sharaiha

Game Maker is an exceptional program that is targeted to help exceptional people with great will and wide imagination to make their "dreams" come true. On the Game Maker Community, we see lots of games being published every day, but unfortunately, we don't notice the great deal of games that aren't being published, even though they are really great – sometimes even complete – but never have a chance to be distributed!

That is why I will dedicate this article for those of you who weren't so lucky in terms of finding good hosts for your games and projects. This is because I – and any other GMC Member – would really love to see more good games in the GMC, and higher productivity rates.

There are many types of sites on the net that would help you publish your game starting from file hosting till

other software like installers, etc. Now, I will start explaining all the important terms as if you were an absolute newcomer with very little or no experience regarding the internet, etc., because that was what happened to me when I joined a few years back.

First of all, let me say that you will find a comprehensive list of useful hosts and resources on the game maker forums, in a pinned topic inside the

Introduction to Game Publishing Cont.

Distributing Games Forum, called the [Recommendations](#) topic.

Anyway, let's start explaining the important terms that many beginners wouldn't know:

Uploading

Uploading is the process of creating a copy of a certain file located on your home pc hard disk in any web server on the net. This process is what enables people to access your file/game and download it on their own computers.

Web Hosts

Web Hosts are the companies or sites who are dedicated to have your website stored on web servers (usually their server). Some web hosts provide their services free of charge, while others provide specialist dedicated hosting plans to more professional businesses in return for some amounts of money, usually paid monthly.

Web Space

Web space technically stands for the storage of files on the net, however, many web space provide "private web space" which is only accessible by you, and acts as additional personal space for you to store your personal files on. Using private web space, members cannot see or download your work.

Redirection

Redirection is the process that happens when one page moves you to another page. A very big example for redirection is the Dot.TK service, where you can get a [www.something.tk](#) domain and let it point people to your real host (which has a long URL, e.g. [www.myhost.com/people/me/](#)). In such services, you cannot upload any of your files, and they provide no sort of web space for you, they only point to another webpage to make the address you use to access the site shorter.

File Hosting

Some people are offering you to only host your files (e.g. games) on their

site, but not your whole site (pages, etc.). This could be useful if you either a) don't have a site or b) have limited hosting resources and want to save up your site's resources (space limits, etc.). Whatever is the reason, file hosting is a very good solution.

Image Hosting

Image Hosting has the same concept as File Hosting, except that it only allows you to host image formats, like bitmaps, JPG files, GIF files, PNG files, etc. Since they are more specialized in the image area than file hosting, they are supposed to be better, and often do provide interesting useful services, like adding thumbnails to the images. My favorite Image Hosting site is <http://imageshack.us/>, but there are many others that are just as good, or better.

Now that you know the main concepts and their meanings, you should be able to figure out how to host your own game (remember the recommendations link I gave before).

Game Publishing isn't only uploading, even in the free game sector, you must make sure your game is appealing, and that it attracts people before seeing its actual contents. This could be done by posting artwork and screenshots of the game, writing some good stuff about it, providing good support for it, and anything you can think of to make users want download this game more!

There is no right way for game publishing, but I personally prefer doing the following steps to ensure that you have all the important elements of game publishing.

1. Upload the Game

This doesn't have to be the first step to take, as our entire first few steps are supposed to be done 'at the same time', so the important thing is doing it! For the uploading of the game, I prefer uploading it to a special File Host, and would be even better if you actually upload it to multiple file hosts as "mirror" links.

The reason I say separate File Hosting is better is that even if you do have your own web hosting, unwanted things may happen. Like, for example, many hosts (especially free ones) may go down at unexpected times, leading potential downloader's to loose interest in the game after a while. Having separate file hosts will also save your bandwidth and other server resources.

2. Upload some screenshots

For the uploading of the screenshots, I prefer doing so to special Image Hosts, such as Image Shack or Photo Bucket. There are specialized image hosts and tend to provide better services in general.

3. Make a page dedicated for the game in your site

Having your own site is a big benefit, it allows people to get support if they face any troubles running your game, comment on the game, get more information about it, and more. Therefore, IF you have your own site, then it would be extremely useful for you to set up a special page on the site that is especially dedicated to your game, with some text about it, screenshots, and a link to download the game, contact information, or anything you think is essential for downloads to know. And, in order to save both time and server resources, use the same screenshots you uploaded in the previous step, and provide a link to the game you have uploaded in the first step.

4. Announce it in the forums

Post a topic about your game in the forums where you also describe it, put the screenshots and link to the game in them, and just wait for members to reply. But remember to read the forum rules before you post the topic.

That's it! I hope this article was beneficial to you, but still, it's just a guide for beginners to hosting and game publishing.



Eo: The Evolution

By Eyas Sharaiha

Eo is one of the very famous Game Maker groups, the group started as “H Unit” and later evolved into its current forum.

Below is one of my past interviews with Hyun, the “creator” or “founder” of the group. The interview took place slightly after the announcement of the “Launch of Eo” what seems like a decade ago.

I really apologize to Hyun for taking so long to publish this article, but life got in the way for a while.

The Interview

When did you start using Game Maker?

“A rather long time ago, around late 1999. However, I didn't start to use it 'properly' until I came across 3.3 in 2001.”

What was your first game in GM?

“A poor Space Invaders clone, using the standard sprites that came with Game Maker back in the days of 3.3.”

What are you most proud of for doing before starting H Unit or Eo?

“In terms of games, creating my first two games for public release. They weren't very popular, but I was proud at the fact I could program two games in the space of a week, to a polished off standard.”

How did you the idea of H Unit first occur to you, and who are the first few members in the unit?

“The Unit first started off as a gimmick, a clan as if it were. However that was rather lacking - so it died rather quickly.”

“A few months later, I felt something was needed to be done about the quality of the games made with Game

Maker. Reminiscent of the demoscene days of the Amiga, I had decided to create a group where we can exclusively push the boundaries of GM, and discuss such ideas and expertise in an environment free from the clutter usually associated with the GMC - hence the invitation only basis of the group. To push such boundaries, I felt it was necessary to find people who were talented with Game Maker and with Game Design in general. And from then on - we haven't looked back.”

“Shadestorm was the first member of the group officially, and is one of the pioneers behind the ideals of the community.”

What criticism did you receive before H Unit officially became a Unit?

“None, as far as I can recall.”

Why did you really change H Unit to Eo? You could make a whole makeover on H Unit without changing the whole name after all.

“We felt it was time to take the community in new directions, find a name that was more representative of the group as a whole. It was also done, to leave behind a name that has got some unnecessary bad press off people. The major reason though, was for a fresh new start.”

What are key changes in Eo?

“H Unit only used to exclusively cover freeware games. Eo has now expanded to cover shareware games, applications and non Eo games (i.e. the Game Maker Radar.) We've also had a shift in our methodology in working.”

Internally in Eo, between the members of the unit, have there been any changes? If so, what are the most significant changes in there?

“There haven't been any changes in the

community itself. Some members have unfortunately decided to leave the group due to personal reasons beyond their control.”

Is it true that Mr. Chubigans only joined the H Unit website after you began developing Eo, is that correct? If so, why didn't he join before?

“No, he was already a part of H Unit. The site was no longer updated when joined; therefore his name was not on the site (H Unit site, ed.).”

What is the reaction of those people who did hate H Unit before, did anything change?

“They still hate us, for some rather silly reasons ;)”

Until now, how do you feel about the (unconstructive) criticism on the unit? Has it stopped after Eo was officially launched?

“You just deal with it. Some people are not going to like you - it's a fact. The best thing to do was just plough on with what we had to do.”

Do you have any future plans for Eo that you can tell us?

“Our current aims are to increase the portfolio of games at the site, and also to increase publicity for shareware ventures in the future.”

Please go ahead and write any other remarks or comments that you had but didn't have the chance to discuss.

“Thanks for the interview! I hope it sheds some light on the origins and workings of the Eo community!”



Spotlight By Eyas Sharaiha

In the spotlight for this issue, we have an excellent engine that is still in the works, probably missing a lot from its final stage, but still, I would consider it a legend a work of art. I present to you the *3D RTS Engine*.

3D RTS Engine

By Master Xilo

Now before I start telling you how wonderful this engine is, I must confess, I have no idea why the guy picked this name; I mean – come on!



There is no need to waste your time gazing at this picture trying to remember from which commercial game it was taken from, because it wasn't! It is actually no more than a simple screenshot of the 3D RTS Engine! The features of this engine are very important in the Real Time Strategy gaming market, such as unit arrangement (here it exists as line, cone, and rectangle), path finding, and cool 3D graphics!

Now, let's start talking about the pros and cons of this RTS engine.

+ Pros

The think that I have noticed in the instant I started trying this engine out was the cool and excellent graphics, its smooth and excellent multi-leveled terrain, the options it included for advanced unit formation that could be either line, rectangle, or cone formation, showing future unit position in unit formation, listing selected units, easy unit selection, and great walking.

The pros of the engine could be summarized in the points below:

- Unit formation (with cone, line, and rectangle)
- Smooth terrain with multiple heights
- Selected units are listed
- Great 3D Graphics
- Excellent textures
- Controlling Groups
- Smooth walking
- 2 Dimensional Unit Selecting
- 3D outline for observing position on the map

- Cons

The problem with the engine is that even before I started noticing the pros, I noticed some many serious cons. entering the executable of the engine required lots of time; I even thought it stopped responding for a while, but apparently, it was still loading! I've also noticed the huge amounts of memory it ate up while it was running, they were much larger than many gigabytes-large commercial games - THAT is clearly unacceptable! I have also noticed it took lots processing power, and, additionally, still ran extremely slow. This slow running made the mouse to move annoyingly

slow, and for the units to take a while to respond. The cons of the engine could be summarized in the points below:

- Extremely slow to load
- Takes a lot of time for units to respond
- Takes unbelievably large amounts of memory when run
- Takes a huge percentage of the processing (depending on PC)
- Slow running in general

In general, it is a very good engine; cleaning its coding and fixing it up a little bit should hopefully remove those enormous speed issues. It also needs some polishing to add other features like buildings, etc to emphasize and even increase its pros. Anyway, it is a great piece of work and you can take a look at it in its GMC topic located here:

Reviewed Version:

<http://forums.gamemaker.nl/index.php?showtopic=210170>

Newer Version:

<http://forums.gamemaker.nl/index.php?showtopic=221520>





Guide to a Better Game Design

By Eyas Sharaiha

Game Design is the most important part of any game, no matter how good is the graphics, sounds, and game play is – no game would ever be complete without having good Game Design. And, in this guide, we will show you some good ways to have good game design and therefore a good game in general.

Here are our steps to better game design:

Love the Game!

If you just want to make a game for the sake of it then stop right now! In order to make a good game, you need inspiration, you need to want to make the game, love the game idea, and love the game itself – enjoying playing this game! And not only do you need to enjoy playing it, but more importantly: enjoy developing it. The importance of enjoying the development of the game lies with the fact that if you don't enjoy the development itself, you wouldn't be able to make and program what you have planned! It's plain and simple, when you hate making the game, you won't pay attention to all the details you have planned in the first place, resulting in you having a different outcome that what you have expected, or wanted, and usually, this outcome is worse – so beware!

Have a Plan!

Believe it or not, plans are always important. You can't just try to program and improvise! Have it all written down – or even better: illustrate it! You must, before starting the programming phase, have a clear idea of what the game's going to be about. Though it is always a good idea to have a written plan, it is not a requirement; just have a plan, at least in your head!

Also, let's get one thing straight! When I say “plan” I just don't mean this simple, general idea, revolving round what would the game be about! What I mean by plan is a very detailed idea (or group of ideas!) about the game and its levels, objectives, missions, and basically – everything!

Also, a very important part of the plan is making sure you decide about the basic game play features, like: should it be three-dimensional or two-dimensional, its genre: platform, RTS, turn based, etc, and also basic non-game features, like: how should the main menu be like, etc.

After you have that all sorted out, then you are officially ready to start working on a good game that many people will (hopefully) like.

Change is Fine!

While programming, it is almost certain that you will find some aspects of your plan to be wrong, or maybe just improvements that you think of at that moment that would require a change in your plan, and that is completely fine and, in most cases, beneficial. It is beneficial because when you plan this sort of things, there might be many things that you haven't thought of or considered, and, when you really try to make it work, you would find that some of your ideas are irrelevant, or simply just wouldn't fit. Whenever you think of change, or a new idea, don't be afraid, even if you ended up changing most of the game, but always keep in mind the rest of your game-plan and how is it going to be affected by this change.

Create an “Atmosphere”

This section includes elements outside the “Game Design” field, however, I thought they were really important to

any game, and decided to put it with this article too:

You must create a certain tone or atmosphere for the game. If you want to make a scary game then make the colors dark, the graphics scary, the music slow with a low pitch, and most importantly: background effects and small details. Nothing works better to create the atmosphere you want than those small details and background effects.

Like, in our example, the “small details” would be dead bodies, dead trees, and blood, and, the “background effects” I was talking about could be divided into two parts: Visual Background Effects and Sound Background Effects.

Visual Background Effects could be ghosts flying around that wouldn't affect the game play itself, some people being killed in the background, blood being spilled down, occasional explosions, etc. The possibilities are endless! And making them isn't so hard, they just take lots of your time, which is the reason most people neglect them – and that is why you must “Love the Game!” as described in the first part.

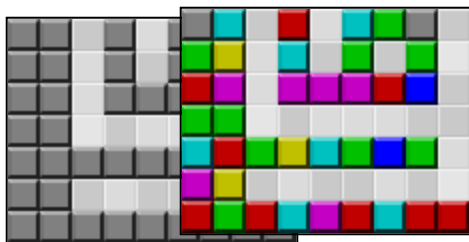
Sound Background Effects are extremely important in creating an atmosphere for the game. However, for some weird reason, people always seem to think that graphics and visual effects are more important than sound effects – that is completely wrong! Sound Background Effects could be occasional screams of a young girl, someone saying “Help Me” every particular amount of time, strange sounds of ghosts saying “wooooooooooooo!” and more!

Guide to a Better Game

Design Cont.

Another important Sound Item that must exist is the music, which I only briefly mentioned in the first paragraph of this section, but I left it for later to be described in detail. The sound of music must be somewhat low to allow the player to easily notice the “Sound Background Effects”. Also, listening to the music itself with your eyes closed must alone create the atmosphere you want in your head.

Also, you should either have a very long piece of music or just a group (4 or more) of music files who each give a different feeling, but still pointing out to the same atmosphere. This should be done so that the player wouldn’t get bored of the music, and instead let them enjoy it. Also, it would be better to leave a gap of 1 or 2 seconds between each song and another, so that things would feel better.



Variety is always good!

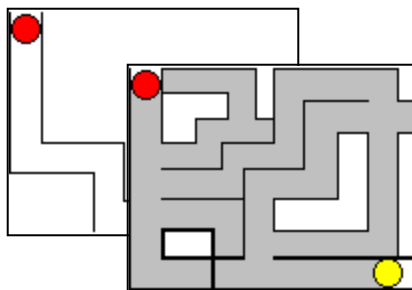
Believe me: having variety in your game is crucial. Any player would be bored to death when seeing repetitive things. Take a look, for example, on these two images above, as you see, one of them is colorful, and other is has the same color repeated over and over again. It doesn’t take an expert to say that the one of the left is more boring, and the one on the right is more fun! Of course, when I’m talking about variety, that doesn’t just mean different blocks, it means different everything! I mean different enemies, bosses, attacks, techniques, etc. For example, always teach your player new techniques, for example, after the first

level in a platform game, you might want to consider teaching the player the “double jump”, or maybe in an advanced level, make the player use guns, or even have the ability to fly! With imagination you can do everything!

Not only that, but also, if your game consists of missions or levels, make sure each mission is drastically different than the one before. It is okay to have two similar missions, just make sure they’re not in a row!

Create Losing Factors!

Games where you never lose are not so good, because the actually fear of losing a game is what drives you to continue playing and may eventually hook you up to this game, or make you sort of “addicted” to the game. One of the simplest losing factors is time limits: you must reach a certain goal within a certain time period, or else, you will lose! Other than that, you can introduce more advanced factors, like traps, mind mazes and mysteries, and enemies. Also, as it has been pointed out in the previous section “Variety is always good!” it would be better if you make different (or additional ones to those who always exist) losing factors for each level or mission.



Difficulty

Game difficulty is also crucial factor in games, and it is one of the important elements of game design and game play that actually “challenge” the players, forcing them to keep trying to win this game over and over again, until they’re finally hooked to this

game! For example, we have made two simple “mazes” one of them (on bottom) is just a single path, and the other one (on top) is a real maze, that can actually trick the player! “Difficulty” combined with “Losing Factors” are the probably most important factors to create “addictive games”, as they are called.

Random! Random!

The first time you run the game shouldn’t be like the next time, and the second time shouldn’t be like the third! It’s plain and simple: make some of the game elements “unexpected” to the player, this feeling of not knowing what *exactly* is going to happen next is really beneficial to the game.

However, you must be careful, because only the small details are what are supposed to be random, not big details! For example, you shouldn’t change the arrangement of levels, look of the main player, objective for each level, and so on.

Dynamic! Dynamic!

As discussed in the previous section, the feeling of not knowing what’s going to happen next is really beneficial to the game. And in order to make the game better, you obviously should try to elaborate this feeling.

Other than random small details, there must be interaction with the player, for example, if you start the game once, and walk a little bit to the left, the enemy you’re facing should react in a different way than if you walk a little bit to the right. This is done by making the enemies or anything in the game, intelligent by using various techniques of AI (Artificial Intelligence) which won’t be discussed in detail; just remember to use lots of IF Conditions to make your objects “interact” with the player as much as possible.

So that’s it! Hope you enjoyed it!



Useful Game Maker Stuff: By Eyas Sharaiha

Scripts

In the “Extending Game Maker” forum, we find lots of good scripts and DLLs for download, all of them could be useful for many games, and we’re going to point out some of the useful scripts, and some of them didn’t get that much attention.

Auto Insert Line Break Script

By DFortun81

This is one of the useful scripts that would have common use everywhere in the GMC. It will insert line-break symbols “#” (i.e. the character chr(13).) in a certain string so that the text would wrap itself within a specific width, both the string and width for the string to be wrapped within are defined by the user.

[Here](#)

My Text Typer

By Josh @ Dreamland

This is a very useful script that acts as some sort of “textbox” engine where you can make the script write colored text by simple {color} tags ({c_red} or {FFFFFF}). It works very well, but should be used carefully; it is not used in the draw event or the step event, but must only be called once. Still, I do think that this is a very useful script for those who want to draw colored text.

[Here](#)

GM Windows Textbox

By DeadMeat

With lots of confidence, I say that this is one of the most (if not the most) well done Game Maker Textbox imitators.

PP: I know this
people to play
Tiberian Sun or

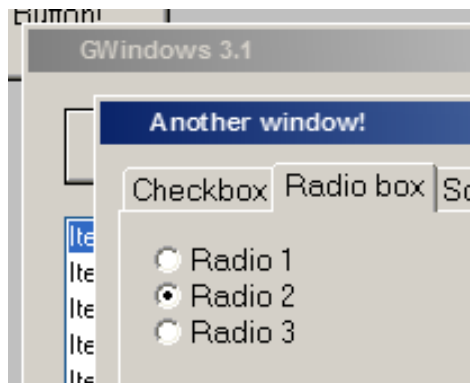
It is so good that in fact, the textboxes could be of multiple lines (imitating TMem components) single line (Tedit), could be editable, or just read only. The cursor could be moved to insert new text in the middle of the text, it could be used (in cooperation with the mouse) to select multiple lines of text or characters and type over them. The selection is done very smoothly, so is the whole process, its only problem that I could find is that textboxes only write as much text as they would fit (in exception of multiple lined textboxes with scrollbars). Still, I see this as one of the best and definitely something that I would recommend to others.

[Here](#)

GWindows System (v3)

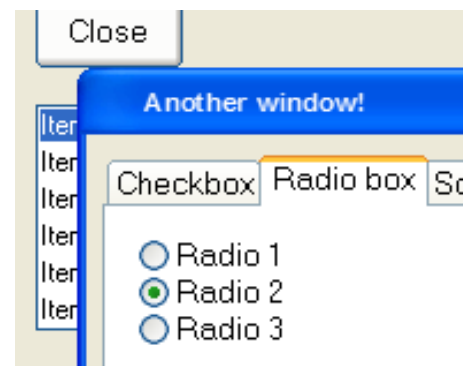
By lelo707

During the release of the second version of the GWindows Scripts, there were really cool and considered by most people as “the thing!” I remember how much I was astonished when I saw them for the first time and was so fascinated by the way they work and how good they do. And in late 2005, lelo707 announced that he was going to start working on a new version of GWindows, and by what we can see now, it is excellent!



It now has child windows, excellent menus, and long with its previous

features like buttons, lists, textboxes, and so on. Also, this time, lelo707 has decided to add the ability for having the XP Style, and even the possibility of toggling between the 98 (or 2000) style and the XP Style as simple as calling one simple function.



This set of scripts is definitely a must-try, even if you’re working on games where textboxes wouldn’t be useful, I do strongly encourage everyone to try this set of scripts, and you’ll be fascinated by how large anyone can expand with GM alone.

[Here](#)

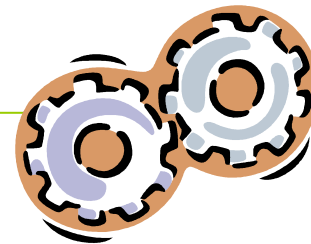
Conversion from Decimal to any base and back

By wormhole

Okay, okay, I know! This set of scripts doesn’t *exactly* fit under this article, cause they’re not that useful, but still, you may have a strange game that needs those functions! Anyways, I really think this is a very nicely done set of scripts and showcasing it here is really worth it. It would help those who want to convert decimal to binary, decimal to hexadecimal, or to any other base. It is also good educationally to let you get to know the different numerical bases.

[Here](#)

FF	->	255
F0	->	240
10	->	16
100	->	256



Useful Game Maker Stuff: By Eyas Sharaiha

DLLs

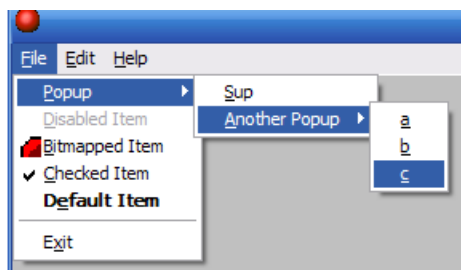
In the “Extending Game Maker” forum, we find lots of good scripts and DLLs for download, all of them could be useful for many games, and we’re going to point out some of the useful DLLs, and some of them didn’t get that much attention. This is part two of our article.

N Menu

By Nintendofreak88

This dll did really make lots of buzz in the past, and for some reason – the buzz is back! Everyone is just fascinated by this DLL the same as they were fascinated about one year ago – when it was first created. With this DLL, you can create a nice menu on top of the GM executable window; it can contain main items, sub items like, as well as sub-menus that contain items inside, like “Send To” “Toolbars” etc. BEWARE of this excellent DLL!

[Here](#)



GM Physics

By coderchris

This DLL is one of the most excellent ones indeed! It has a very well-done realistic physics with many highly wanted features, like water system, ragdolls, boxes, joints, rays, wind, magnetism, the most exciting

explosions, body layers, custom polygons, and basically: everything you can dream of in a very high speed! Just visit its topic at the GMC to find its download link and a complete list of its fantastic features.

[Here](#)



GMWW DLL (Game Maker Windows Widgets)

By Roach

In part 1 of this article, we have described many good scripts that would actually imitate windows features like text boxes, list boxes, and windows, but when we’re talking about DLLs, its not about imitating anymore, its about the actual features and implementing them! The GMWW is probably the most expanded and updated windows widgets dll in the GMC, and it’s really helpful for those who like to develop applications with Game Maker, or those who need it for some reason in their games.

[Here](#)

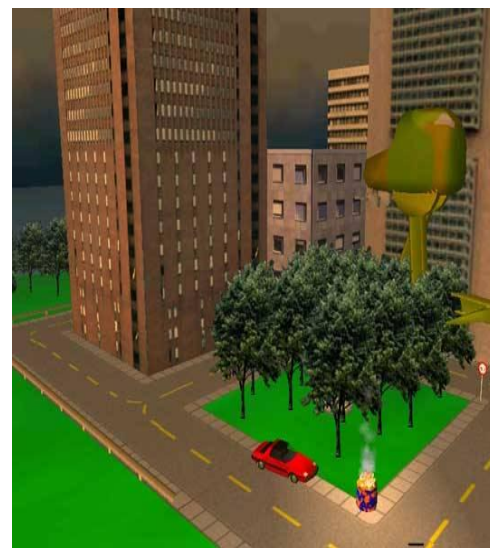


Ultimate 3D

By Dr_Best

Though this 3D Engine is somehow old, it is still a high-quality 3D engine that works really well and does the job done. Probably there has been little interest in such DLL because of Game Maker 6’s 3D Functions, but still, speed and other fantastic features of Ultimate 3D may actually cause us to prefer using this dll over GM’s d3d functions. It has light mapping, pixel shader support, shadows, textures, lens flare, sky boxes, advanced culling, and much more!

[Here](#)



Game Maker's Benefits

By Eyas Sharaiha

Game Maker might be criticized outside the Game Maker Community, but no one who has truly tried it can deny its benefits.

Game Maker is beneficial to computer users who have just begun programming, and also to advanced users who are professional at coding, etc.

That is because Game Maker, in principle, is based on many geometrical and mathematical concepts that are necessary to understand for better educational performance in schools and even universities.

Using Game Maker, especially from an early age establishes a good foundation for important concepts that the user will encounter at an older age, which will provide the user with a very important advantage: the ability to quickly and easily understand complex mathematical and geometrical concepts and skills.

So *what* is the concept that Game Maker introduces that makes it so beneficial? Well, first of all, coordinates. Knowing what are x coordinates and y coordinates, how they are written (x before y, etc) will help people understand concepts such as the Cartesian Plane, and easily apply Game Maker skills for solving relevant problems.

Other than that, there's direction, which not only improves geometrical skills, but also mathematical! When people need to change their objects direction, their multiplication and addition skills will improve, for example, the frequent usage of the directions 0, 90, 180, 270 for simple motion will help the user memorize multiples of the number "90" in addition to multiplication in general.

Third, many Game Maker functions such as `degto rad(val)` and `radto deg(val)` also introduces younger users to the existence of other angle measurement functions.

In addition, Sine and Cosine functions probably ease the understanding of trigonometry as a concept and trigonometric functions particularly.

If conditions creates more logic to the user, especially when followed by "else" statements.

Logical operations such as "=", ">", "<", ">=", and "<=" also increase the logic of the user, and enhances the thinking skills of the user in general. Such operations occupy the person's thinking when trying to solve certain problem with the game/program being worked on.

Not only that, but even functions as easy as drawing circles might expand people's thinking skills!

Game Maker is a highly beneficial educational tool, but as it has been discussed earlier, it expands knowledge and skills in other areas than programming and game development.

So now it is time to describe the benefits that have been targeted by Mark Overmars as he developed it.

Game Maker's most recent versions have been developed in a way that eases the understanding of object-oriented programming in addition to programming in general.

It has separate resource groups which creates a clear organization and structure for the game in the making. Sprites are in a group other than timelines, objects are separate than

rooms and backgrounds, everything is integrated yet separate at the same time, making things much more understandable and makes sense as well.

Game Maker creates an understanding for the user about the way objects exists, how they can be visible or invisible, how they can interact with each other, and perform all the tasks you need.

You understand how everything is connected, how an object can create or destroy another one, how it can manipulate room settings, and interact with the user.

In addition, the Object Properties window in Game Maker is so clearly organized, making it very easy to understand yet very educational at the same time.

In the Object Properties window, you can see how any object can perform "actions", but you also understand that the object "doesn't know" when to perform these "actions", meaning they must be performed on a certain occasion, this occasion is called an "Event", and suddenly, everything makes sense!

Also, Game Maker's code is hugely similar to C++ and Java, which makes it hugely easy to understand code written in these languages and even learn how to program.

In conclusion, I'd like to recommend older readers of this article, who are either parents, or have relatives who are as young as eight or nine years old to start and try this tool: Game Maker, because it is very likely to boost their knowledge and skills, educationally and their intelligence in general.

And that's it; the very first issue of Markup is complete! It has truly been delightful to work on it. This issue has been edited, corrected, written by, and designed by the GMking.org staff and members – everyone's efforts are truly appreciated.

In the future issues of Markup, we'll be expanding the articles, writers, and staff in general to make a much more versatile magazine, dedicated to Game Development in general. You will see more nice articles and tips, rants, talks about codes, reviews of games and IDEs as well as much more.

Everyone at GMking.org has done a magnificent job, and that's why I'd like to dedicate this portion of the magazine to talk about GMking.org and its services.

For those who do not know, "GMking" stands for Game Making, and that's what it is all about. GMking.org is dedicated to provide first class services to all game developers on any programming language, IDE, or operating system.

GMking.org has many services, included a very nice uploader called OpenLoad (<http://openload.info>), an IRC Server (<irc://irc.gamemaking.org>), a Game Development wiki (<http://wiki.gmking.org>), a supportive community (<http://forums.gmking.org>), and the main site of course (<http://gmking.org>), which provides its visitors with downloads of tutorials, examples, and software.

I'd like to talk about the IRC Network in specific, as it is a great medium of communication. We offer anyone and everyone to make their own channel on irc.gamemaking.org for free – all Game development channels are encouraged and appreciated as well.

Don't forget to try out our uploader as well; its excellent download speed (and normal upload speed) will surely impress you.

And since I'm running out of space, I'll just close with GMking.org's slogan:

Let them Make Games!

Eyas Sharaiha

Colophon

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